

**GOODPASTURE ANALYSIS AREA**  
**REVISED ENVIRONMENTAL ASSESSMENT**  
**No. OR 090-EA-99-09**

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## 1.0 PURPOSE OF AND NEED FOR ACTION

### 1.1 Introduction

The Bureau of Land Management (BLM) proposes to implement forest management activities in the McKenzie Resource Area. The area is approximately 15 miles east of Springfield, Oregon, and one half mile south of the McKenzie River, located in the Vida - McKenzie Watershed Analysis Area. This watershed measures approximately 135,775 acres in size (BLM managed public land is about 14,935 acres or 11% of the area, private land is about 84% of the area, State and City about 1%, and the remaining 4% USFS ). The legal description for the proposed harvest activities is T. 16 S., R. 2 E., Section 33 of the Willamette Meridian.

The Proposed Action includes a regeneration harvest on an estimated 46 acres of approximately 57 to 110 year old stands. This project would not construct any new permanent roads. After harvesting activities approximately 0.8 mile of existing road and spurs roads would be subsoiled, planted, blocked, and fully decommissioned, to include approximately 0.1 mile of temporary road. The proposed action also includes some habitat enhancement on 10 acres for "*Cimicifuga elata* conservation strategy."

The Goodpasture Analysis Area was previously analyzed in March, 1998 in EA No. OR 090-98-18. Since March 1998, Eugene District has developed guidelines for the management of Category 1, 2 and Protection Buffer species and has surveyed for these species within and adjacent to the Goodpasture Timber sale. The need for updating the original Environmental Assessment (EA) is (1) to describe the management recommendations for Category 1, 2 and Protection Buffer species, (2) to discuss the

environmental impacts of the management recommendations on Category 1, 2 and Protection Buffer species and (3) to provide additional information and clarity for hydrology/water quality and soils regarding achieving the Aquatic Conservation Strategy (ACS) Objectives. The original need for action still applies and it is as follows:

### 1.2 Objectives:

- Promote production of merchantable timber with a timber sale from Adaptive Management Area (AMA), while retaining some larger trees and snags for maintaining forest health, productivity, and biological diversity.
- Enhance habitat conditions and reduce road density by decommissioning roads where feasible.
- Comply with the Standards and Guidelines in the Record of Decision (ROD) for the Northwest Forest Plan, and the Eugene District RMP.
- Alter stand structure within the reserve of a *Cimicifuga elata* population selected in the "*Cimicifuga elata* Conservation Strategy" as a population needing habitat enhancement.

Subsequent to the March, 1998 EA the BLM conferenced with the US Fish and Wildlife Service on Bull trout and received a "Not Likely to Adversely Affect" determination, June 24, 1998 and conferenced with the National Marine Fisheries Service on Spring Chinook and received a "Not Likely to Adversely Affect" determination, May 7, 1999.

Included as part of the Northwest Forest Plan are guidelines for the management of old-growth related species and the production of a

sustainable level of timber. "Survey and manage" provides standards and guidelines to provide benefits to amphibians, mammals, bryophytes, mollusks, vascular plants, fungi, lichens and arthropods that are assumed to be old-growth associated species. The standards and guidelines contains four components (and protection buffer species), each with different priorities and species that they apply to. See the Standards and Guidelines for Management of habitat for late-successional and old-growth related species within the range of the Northern Spotted Owl for the lists of species that each component applies to. Components 1, 2 and Protection buffer lists apply to the Eugene District. Surveys for Component 3 and 4 species are being done at a regional level by the Regional Ecosystem Office and do not presently apply at the District level. The Eugene District is required to manage known sites of the species on the Component 1 list. Surveying for these species is not required, however when one of these species is located, it becomes a known site. Component 2 species require surveys prior to ground disturbing activities and management of known sites. Protection buffer species also require surveys prior to ground disturbing activities. These species are assumed to be rare and locally endemic. When located, occupied sites are to be managed for the benefit of the species.

Areas considered for timber harvest are outside of Late Successional Reserves (LSR's), Riparian Reserves (RR), and Key Watersheds.

### **1.3 Conformance**

This EA is tiered to the Record of Decision (ROD) for Amendments to Forest Service and Bureau of Land Management Planning Documents within the Range of the Northern Spotted Owl, April 1994, and the Eugene District Record of Decision and Resource Management Plan (RMP), June 1995. Actions described in this EA are in conformance with the

Aquatic Conservation Strategy (ACS) Objectives listed on page B-11 of the Northwest Forest Plan (NFP) and in Appendix A of this EA. These documents are available for review at the Eugene District Office of the BLM, Eugene, Oregon.

The Analysis File contains additional information used by the interdisciplinary team (IDT) to analyze impacts and alternatives and is hereby incorporated by reference.

Plan maintenance documentation postponing surveys for 32 Component 2 and Protection Buffer species was recently completed ("Plan Maintenance Documentation, USDI Bureau of Land Management, To Change the Implementation Schedule for Survey and Manage and Protection Buffer Species," approved March 3, 1999). The Proposed Action and alternatives are in conformance with the direction provided in the Plan Maintenance Documentation. The implementation of the plan maintenance is provided for by BLM planning regulations (43 CFR 1610.5-4).

The effect of the plan maintenance action was analyzed in an environmental assessment, "To Change the Implementation Schedule for Survey and Manage and Protection Buffer Species," issued October 7, 1998 ("Schedule Change EA"). The analysis contained in the Schedule Change EA is incorporated into this document by reference. Both the Schedule Change EA and the Plan Maintenance Documentation are available for viewing at the Eugene BLM District Office or on the internet at <http://www.or.blm.gov/nwfp.htm>.

### **1.4 Scoping**

The scoping process identified the agency and public concerns relating to the proposed projects and defined the issues and alternatives that would be examined in detail in the EA. The general public was informed of the planned EA

by the inclusion of this project in the Eugene District Planning Update. Letters were also sent to adjacent landowners. A copy of the scoping mailing list is in the Analysis File. Four comment letters or phone calls were received.

## **1.5 Identified Issues:**

### **1.5.1 Merchantable Timber Production and Productivity (Issue #1)**

Emphasize production of merchantable timber from GFMA lands, while retaining some trees and snags for maintaining forest health, productivity, and biological diversity.

Contribute to Potential Sale Quantity (PSQ) for McKenzie Resource Area.

Key Indicators: Acres of regeneration  
harvest  
Estimated timber volume

### **1.5.2 Roads (Issue #2)**

Timber harvest activities will increase road activities and alter the ecological function of these habitats.

Key Indicators: Open Road Densities  
(miles/sq.mile)/New Road  
Construction (miles)

### **1.5.3 Habitat Enhancement (Issue #3)**

Allowing more sunlight into the understory of a *Cimicifuga elata* population will increase growth on this species.

Key Indicators: Special Status plant  
species

### **1.5.4 Category 1, 2 and Protection Buffer Species - Fungi, Bryophytes and Lichens (Issue #4)**

Implementation of interim management recommendations.

Key Indicators: Substrate integrity,  
microclimate

### **1.5.5 Category 1, 2 and Protection Buffer Species - Mollusks (Issue #5)**

Implementation of interim management recommendations.

Key Indicators: Presence of big leaf maple,  
presence of down logs, canopy closure

### **1.5.6 Issues Identified but Eliminated from Analysis:**

**1.5.6.1 Threatened or Endangered Plant or Wildlife Species --**  
T & E species were not found in the project area.

**1.5.6.2 Special Status Plants**, with the exception of *Cimicifuga elata*, Special Status Plants located during the botany survey are in the Riparian Reserve and not part of the proposed harvest area.

**1.5.6.3 Habitat Connectivity** — Not a key concern because only 15% of the 320 acre block of public land is being harvested. Habitat connections would be maintained through Riparian Reserves and extensive amounts of deferred GFMA areas.

**1.5.6.4 Fragmentation** — The edge effect and contrast of this proposed harvest area are not a key concern. Primary elements of the habitat (cover, food, and water) would still be a part of the landscape, and big game wildlife populations would remain static to upward trend.

**1.5.6.5 What are the impacts to 32 Survey and Manage and Protection Buffer Species.**

No site specific surveys were completed for any of the 32 Component 2 or Protection Buffer species listed in the

Schedule Change EA. Informal surveys for these species were conducted on some of the harvest areas before it was determined by an interagency team that it was not technically feasible to survey for these species. Individuals of *Ulotia megalospora* and *Lobaria hallii* were found, incidental to other surveys, and appropriate management actions would be implemented under all alternatives. However, it is possible that additional individuals may reside in the project area.

## 2.0 ALTERNATIVES INCLUDING THE PROPOSED ACTION

This section describes alternatives identified by the IDT, design features associated with these alternatives and detailed information can be found in the Goodpasture Analysis Area file.

### 2.1 Alternative I - Proposed Action

This proposed action involves eight treatment areas. All of these areas in Section 33 are approximately 57 -110 year old Douglas-Fir stands. All adjacent Riparian Reserve areas retained interim widths of 220 feet on each side of the streams for aquatic habitats. The regeneration harvest units would be leave-tree-marked for required snags (3.4 trees per acre; marked trees will be  $\geq 15$  inches in diameter distributed across the diameter range), green tree retention trees (7 trees/acre averaged over the area; minimum diameter for trees scattered throughout the unit will be 14 inches; trees will be marked in all diameter classes and will mimic the diameter distribution in the stand), and coarse woody debris needs leave 240 linear feet of logs per acre greater than or equal to 20 inches in diameter. Logs less than 20 feet in length would not be credited toward this total. Existing decay class 1 and 2 logs count toward this requirement. Down logs will reflect the species mix of the original stand.

Area 1 (13 ac.), 2 (3 ac.), 3 (9 ac.), 4 (4 ac.), 5 (4 ac.), 6 (1 ac.), 7 (12 ac.) in Section 33 would be regeneration harvested. See the attached map in the back for area location. Project design features of this alternative minimize fragmentation of existing stands, maintains connected habitats, and harvests mid-seral stands. It would also include:

- Cable yarding would be used in 80% of the areas, with ground based logging being used on 20% of the areas on slopes  $< 35\%$ .
- Regeneration harvest units would be planted with Douglas-fir and some Western red cedar.
- Approximately 30% of the wildlife trees would be left in clumps up to 40 trees or less. The remaining 70% would be scattered throughout the unit.
- Brush and slash would be piled by an excavator, covered and burned on all ground  $< 40\%$  slope (est. 20 acres). On all ground  $> 40\%$  slope (est. 27 acres), brush and slash would be swamper burned. Approximately 10% of the excavator piles would not be burned, but saved in a random spacing for wildlife habitat. Large down woody logs would not be piled or burned. Excavator piling operations would be closely monitored next to the mainline road because underground utilities are present and marked. Close monitoring would also be necessary in the vicinity of the water pipeline.
- Up to 3 Big leaf maples per acre would be retained to enhance biological diversity, unless safety is a concern.
- Road Nos. -33.1, -33.5, -33.6, -33.7, "cat road" and spurs A, B, C, E, 7a and 7b, plus approximately 500 feet of temporary spur roads would be fully decommissioned and subsoiled.



### 2.1.1 Management Guidelines for Survey and Manage species (bryophytes and lichens)

*Lobaria hallii*: As *Lobaria hallii* is only known from a few sites (ten or less) across the Eugene District, the site would have a 120 foot buffer placed around it to prevent disturbance to the substrate, retain the host trees and preserve the forest structure (the opening and its ring of trees) around it.

*Ulotia megalospora*: *Ulotia megalospora* (Protection buffer moss) is proving to be more common than originally thought at the time the Forest Plan was written (pers. com. Judy Harpel, regional bryologist) and is not a localized endemic. The species is being found throughout Western Oregon and Washington and is common in the McKenzie area of the Eugene District. Management recommendations for *Ulotia megalospora* suggest that “protection buffers are not required at known sites, if continuity of habitat over time is provided within the watershed. Sufficient protection may be provided in some areas by riparian reserves, late-successional reserves and administratively withdrawn areas. In areas where *Ulotia megalospora* is poorly represented, especially for disjunct or localized populations, maintain habitat at known sites.” (Management Recommendations for Bryophytes, Installment 1,).

As *Ulotia* is widespread and common within the McKenzie Area, no special reserves need to be set aside for this species. As *Ulotia* commonly occurs on hardwoods, hardwoods would be

reserved to provide refugia for the species and inoculum. Green tree retention would be clumped in the areas of higher *Ulotia* abundance to assure that *Ulotia* is present on the retention trees.

### 2.1.2 Management Guidelines for Survey and Manage species (mollusks)

Three mollusk species that are defined as Survey and Manage species under the Northwest Forest Plan and the Eugene District Resource Management Plan were surveyed to current protocol within the proposed Goodpasture Timber Sale in 1998. Oregon megomphix (*Megomphix hemphilli*), blue-gray tail-dropper (*Prophysaon coeruleum*) and papillose tail-dropper (*Prophysaon dubium*) were located within and adjacent to proposed timber sale units. A fourth Survey and Manage mollusk, the Crater Lake tightcoil (*Pristiloma arcticum crateris*), was not surveyed as the project area is too low in elevation to provide suitable habitat.

Current BLM management direction for these species is to follow local guidelines until final interagency guidelines are in place. Currently the Eugene District Office follows Eugene District Interim Management Strategy for Three Survey-and-Manage Mollusks (Applegarth 1998). These guidelines are summarized below:

- Treatment Level 1

Where protocol surveys detect four or more Survey and Manage mollusk sites per 40 acres, no sites require protective buffers. RMP standards for down logs

should be met or exceeded, broadcast burning should be avoided and prescribed fire should be kept to a minimum to meet resource objectives. To qualify for Treatment Level 1, sites need to be located by GPS or other method so they are accurate to within 10 meters. Although not required, sites with outstanding habitat features such as old big leaf maple and unusual concentrations of old down logs should be buffered if buffers don't seriously conflict with other concerns.

- Treatment Level 2

Where protocol surveys detect these mollusks at a rate between one and four locations per 40 acres, approximately half of the sites should be buffered. Buffers in regeneration harvest areas should have a radius of approximately 30 meters (100 ft) or an area of approximately 0.75 acre, or an area that represents a negotiated agreement. No activity will occur within these buffered areas.

- Treatment Level 3

Where protocol surveys detect these mollusks at a rate of one or fewer per 40 acres, all sites should be buffered. Size of buffered areas is the same as described in Treatment Level 2.

### **2.1.3 Management for *Cimicifuga elata***

Area No. 8 includes some habitat manipulation of approximately 10 acres in a sensitive species area of *Cimicifuga elata*, Tall Bugbane, to enhance its population. This sensitive species population was identified in the *Cimicifuga elata* Conservation

Strategy as appropriate for habitat enhancement. This population has a transect in place and two years of pretreatment data. The hypothesis for this enhancement project is: Will selective removal and snag creation of the over story increase the population of *Cimicifuga elata* at the Goodpasture site by increasing flowering and seed set?

Gaps within the *Cimicifuga* reserve area would be created by: directional felling of trees away from plants, girdling individual trees to create snags and/or blowing tops out of trees. These actions would increase the amount of light reaching the *Cimicifuga* and imitate naturally created gaps in the canopy. Project design features would be:

- Approximately 15 trees would be felled away from the known population of *Cimicifuga elata*. Directional felling in this area would have a seasonal restriction, work would be done after seed dispersal finished in late September and would be done by mid-April, several weeks before the plants come out of dormancy. Any felled trees would be left in place as large down woody debris. Trees felled would be conifers (Douglas-fir or hemlock) in a variety of diameter classes.
- Up to 15 individual trees would be girdled.

- Approximately 20 trees would have tops cut off to reduce the size, allowing more light into the understory.

#### **2.1.4 Post Harvest Activities**

- Site Preparation and Hazard Reduction - The regeneration harvest areas would be excavator piled on approximately 19 acres in areas that are <40% slope. On ground too steep for excavator, handpile, cover and burn (or swamper burn) on approximately 27 acres. Retain 10% of the piles in a random spacing for wildlife habitat.
- Silvicultural treatments - Planting goals for regeneration areas would be to have approximately 280 well-spaced conifers per acre at age 20 and, of the conifers, approximately 10 percent would be minor conifer

species at age 20. An estimated 400 to 500 conifer seedlings per acre would be planted. Minor conifer species would represent 10 percent of the planting stock, if available. The hemlock and cedar that are left as retention trees would also serve as local seed source for minor species. The stand would be precommercially thinned at age 15 if they become overstocked; this would also be an opportunity to adjust species composition.

- Road Reclamation and road closure - Upon completion of harvest or site preparation activities, the following spur roads and roads would be fully decommissioned by subsoiling, blocking, pulling culverts and planting: Road Nos. -33.1, -33.5, -33.6, -33.7, "cat road" and spurs A, B, C, E, 7a, 7b, plus 500 feet of temporary spur road(s).

Table 1 Summary of the actions proposed

| FY - Type Yarding                   | Regeneration Harvest Acres | Habitat Enhancement (acres ) | Total Volume (MBF) | (P) Road Construction (miles) | (T) Road Construction (miles) | (E) Road Fully Decommissioned (miles) |
|-------------------------------------|----------------------------|------------------------------|--------------------|-------------------------------|-------------------------------|---------------------------------------|
| (Area 1) 98 - C/M                   | 13                         | 0                            | 550                | 0                             | 0.05                          | 0.38                                  |
| (Area 2) 98 - C/M                   | 3                          | 0                            | 68                 | 0                             | 0                             | 0.0                                   |
| (Area 3) 98 - C/M                   | 9                          | 0                            | 338                | 0                             | 0                             | 0.11                                  |
| (Area 4) 98 - C/M                   | 4                          | 0                            | 177                | 0                             | 0                             | 0.06                                  |
| (Area 5) 98 - C/M                   | 4                          | 0                            | 153                | 0                             | 0                             | 0.02                                  |
| (Area 6) 98 - C/M                   | 1                          | 0                            | 55                 | 0                             | 0                             | 0                                     |
| (Area 7) 98 - C/M                   | 12                         | 0                            | 339                | 0                             | 0.1                           | 0                                     |
| (Area 8) 98 - C/M                   | 0                          | 10                           | 0                  | 0                             | 0                             | 0                                     |
| Outside Harvest Areas (spurs A,B,E) | 0                          | 0                            | 0                  | 0                             | 0                             | 0.26                                  |
| Total                               | 46                         | 10                           | 1,680              | 0                             | 0.15                          | **0.83                                |

MBF - Thousand board feet

C - cable yarding

M - machine yarding

P - permanent construction system road, rocked

T - temporary constructed road, fully decommissioned

E - Existing Road Fully Decommissioned

FY - fiscal year of the timber sale

\*\* See map for locations

## 2.2 Alternative II - No Action

Under this alternative no forest management activities would occur, or habitat enhancement for Special Status plant species. Another area would be proposed for forest management activities to meet the objectives of the GFMA as detailed in the Eugene District RMP.

Timber stands will continue to grow at natural rates. No timber harvest, or road management activities will occur. The quantity, quality, and rate of change of wildlife habitat will remain stable. Potential for additional sediment delivery from non-surfaced roads and non-functioning culverts would continue.

Since there would be no management of the timber resource nor road decommissioning proposed under this alternative no survey and manage species recommendations would be necessary.

## 2.3 Alternative III

The implementation of this alternative would drop areas 3, 4, and 5, deferring these areas to be harvested later in the decade.

Table 2 Summary of the actions proposed for Alternative III

| FY-Type Yarding                      | Regeneration Harvest Acres | Habitat Enhancement (Acres) | Total Volume (MBF) | (P) Road Construction (Miles) | (T) Road Construction (Miles) | (D) Decommissioning (Miles) |
|--------------------------------------|----------------------------|-----------------------------|--------------------|-------------------------------|-------------------------------|-----------------------------|
| (Area 1) 98-C/M                      | 13                         | 0                           | 550                | 0                             | 0.05                          | 0.38                        |
| (Area 2) 98-C/M                      | 3                          | 0                           | 68                 | 0                             | 0                             | 0                           |
| (Area 3) 98-C/M                      | 0                          | 0                           | 0                  | 0                             | 0                             | 0.11                        |
| (Area 4) 98-C/M                      | 0                          | 0                           | 0                  | 0                             | 0                             | 0.06                        |
| (Area 5) 98-C/M                      | 0                          | 0                           | 0                  | 0                             | 0                             | 0.02                        |
| (Area 6) 98-C/M                      | 1                          | 0                           | 55                 | 0                             | 0                             | 0                           |
| (Area 7) 98-C/M                      | 12                         | 0                           | 339                | 0                             | 0.1                           | 0                           |
| (Area 8) 98-C/M                      | 0                          | 10                          | 0                  | 0                             | 0                             | 0                           |
| Outside Harvest Areas (Spur A, B, E) | 0                          | 0                           | 0                  | 0                             | 0                             | 0.26**                      |
| Total                                | 29                         | 10                          | 1,012              | 0                             | 0.15                          | 0.83                        |

MBF - Thousand board feet

C - Cable yarding

M - Machine yarding

P - Permanent construction system road, rocked

T - Temporary constructed road, fully decommissioned

E - Existing Road Fully Decommissioned

FY - fiscal year of the timber sale

\*\* See map for locations

## 2.4 Design Features for All Action Alternatives

Design features include timber sale design, contract stipulations, and prescribed activities to be accomplished by the BLM or timber sale purchaser. The objectives of these design features are to maintain or enhance the quality, quantity, and productivity of the resources in the project area.

- Require one-end log suspension in 80%

of all skyline units. Intermediate supports would be required if necessary to achieve 80% lead-end suspension.

- For designated skid trails where ground-based harvesting is accomplished in the harvest units, subsoil compacted trails and temporary spur roads, plant, block and decommission following harvesting activities.
- Management activities would be altered according to RMP standards and

guidelines if any cultural resources, Special Status Plants including Threatened and Endangered, Surveys and Manage species, and Threatened and Endangered wildlife are found in or adjacent to the harvest areas.

- Felling and Yarding Requirements: Directional felling and yarding would be utilized for the protection of retention trees, snags, and reserve areas.
- To provide habitat for cavity dependent wildlife and to protect the future source of down logs, snags not posing a safety hazard would be retained. Directional felling and yarding would be utilized to protect snags consistent with State safety practices. Snags felled as danger trees would be retained on site as CWD.
- For the purpose of long term site productivity and maintenance of biological diversity, all down material of advanced decay would be retained for Coarse Woody Debris (class 3,4,5).
- Hay bales, sediment fencing, or other methods would be used to minimize downstream turbidity in streams #5 and #6 during stream crossing removal on the portion of Road No. 16-2E-33.1 targeted for decommissioning. Vegetation would be established on the exposed soil slopes as soon as possible.
- Spur roads 7a & 7b traverse Riparian Reserves to access Area 7. Any trees felled for construction of these temporary spur roads would be left in place or used in stream restoration. Both spurs would be fully decommissioned after harvest is completed. Trees and/or logs not needed for CWD or stream restoration

projects due to small size could be sold.

- Hardwoods are to be retained to provide habitat for *Ulotia megalospora*.

## 2.5 Alternatives Considered But Eliminated

- A thinning was considered in the Riparian Reserve areas to enhance old growth characteristics. It would have minimal results however, because the area has been thinned recently.
- Approximately 115 potential acres were originally considered for harvest out of 320 acres of public land in this section. Sixty-eight acres are not proposed for harvest at this time because the area is in the viewshed of a segment of the McKenzie River that is proposed for Wild & Scenic Designation. The potential harvest acres were reduced to approximately 15% of the total 320 acre block of public land, or 46 acres. This also resulted in the original Alternative 3 being dropped.

## 2.6 Monitoring

Monitoring guidelines are established in the 1995 FRMP/ROD, pp. 175, and the 1994 Standards and guidelines, pp. E-1 to E-10.

Table 3 Comparison of Alternatives

| Indicators   | Alternative I | Alternative II | Alternative III |
|--|---------------|----------------|-----------------|
| Merchantable Timber Production and Productivity (Issue #1)   |               |                |                 |
| Acres of regeneration harvest                                | 46            | 0              | 29              |
| Estimated timber volume MBF                                  | 1,680         | 0              | 1,012           |
| Roads (Issue #2)   |               |                |                 |
| Open road densities (miles/½ sq. mile) new road construction | 2.47          | 3.4            | 3.02            |
| Habitat Enhancement (Issue #3)                               |               |                |                 |
| Special Status Plant Species (acres)                         | 10            | 0              | 10              |

## 3.0 AFFECTED ENVIRONMENTS

### 3.1 Vegetation:

The overstory in these areas is predominantly 107 year old Douglas-fir with portions 57 years old with a minor component of hemlock and a few Western red cedar. In portions of the sale area the stands have been commercially thinned. The eastern half of area 1, all of area 2 and 3 were commercially thinned in 1971. Area Nos. 4 and 5 were thinned in 1977.

Understory vegetation consists of vine maple, sword fern, salal, Oregon grape, hazel, and hardwoods (bigleaf maple). The forb layer consists of oxalis, bleeding heart, and forest grasses. Noxious weeds are restricted to the side of the road. Refer to botany report in the Analysis file.

Several sites of *Cimicifuga elata* were located during previous botanical surveys of the general area. *Cimicifuga elata* is currently a bureau sensitive species and covered under a Conservation strategy. The south portion of the special harvest area is a selected population under the conservation strategy to be managed for. This survey located several plants outside this reserve area. All three of these locations are near streams inside Riparian Reserves.

### 3.2 Wildlife:

Common species found in this area include large mammals such as black bears, mountain lions, bobcats, elk, and black tail deer; small mammals such as shrews, moles, chipmunks, and squirrels and many species of large and small birds including raptors and songbirds. Amphibian and reptile species using these types of stands include several species of salamanders, northern alligator lizards and rubber boas.

No unique or special habitat areas exist in any of the potential harvest areas.

### 3.3 Survey and Manage Species

#### 3.3.1 Fungi, Bryophytes and Lichens

Surveys for Component 2 and Protection Buffer bryophytes and lichens have been completed. No Component 2 bryophytes and lichens were found. *Ulota megalospora*, a protection buffer moss was found in several of the sale areas. One site of *Lobaria hallii*, a Component 1 lichen was found in Harvest area 1.

Surveys for Survey and Manage vascular plants were done in the 1996 and 1998 field season. None were found.

#### 3.3.2 Mollusks

Typical key habitat features for the three Survey and Manage mollusk species found in the proposed project area include hardwoods (especially big leaf maples), down woody debris, leaf litter, sword fern and moist microclimates. Mollusk locations within Goodpasture Timber Sale unit have been identified and will be managed using the treatments detailed in the Proposed Action. Eighteen *Megomphix hemphilli* (MEHE), two *Prophysaon dubium* (PRDU) and one *Prophysaon coeruleum* (PRCO) locations were detected during surveys of this area. Table 4 identifies how these treatments will be applied to the Harvest areas.



Table 4 Mollusk site management recommendations for Goodpasture Timber sale.

| Species      | No. Sites | No. Buffered Sites | Acres Affected |
|--------------|-----------|--------------------|----------------|
| MEHE         | 16*       | 0                  | 0              |
| PRDU         | 1         | 0                  | 0              |
| MEHE & PRDU  | 1         | 1**                | 0.75           |
| MEHE & PRCO  | 1         | 1                  | 0.75           |
| <b>TOTAL</b> | <b>19</b> | <b>2</b>           | <b>1.50</b>    |

\*Three of the 16 MEHE sites are located outside of the Harvest Areas

\*\*If there are logistical difficulties, the other PRDU site may be buffered instead of this site.

### 3.4 Soils:

Soils in the project area are of the Peavine, Honeygrove, McCully and Kinney series, and all are suitable for timber production and harvesting. Harvesting on these soils can be conducted using either cable or ground-based logging systems, subject to soil moisture restrictions.

These soils are classified as having High to Moderate Resiliency, i.e., they are productive soils which can sustain some manipulation and still maintain nutrient capital, inherent physical and chemical capabilities, hydrologic function, and natural rates of erosion. In turn, these soils have a high potential for vegetative restoration. Their high soil strength and permeability also make them resistant to surface erosion, even when the surface vegetation is removed. However, once compacted, the fine-textured clayey soils are easily eroded and suspended in runoff. For details on the distribution of these soil types in the project area, refer to the Soil and Water Resource

Report in the Analysis file.

### 3.5 Hydrology:

No field identified streams are located within the harvest areas. Twenty-six non-fish bearing streams were located adjacent to the proposed harvest area. These water resources are protected in the Riparian Reserve, consistent with the NW Forest Plan Standards and Guidelines. Streams associated with the harvest areas are tributaries of the McKenzie River, which is fish bearing and the source of drinking water for the cities of Springfield and Eugene. Identified beneficial uses of water are: aesthetics, resident fish and aquatic life, salmonid spawning and rearing, fishing, water contact recreation, hydroelectric power, and water supply.

District policy is to prevent the acceleration of the natural rate of occurrence of landslides and debris torrents to the degree that these events would significantly degrade fishery resources, domestic or agricultural

water supplies, or other designated beneficial uses of water. Based on reconnaissance level field investigations, the proposed harvest area is considered to have low potential for mass wasting. No slope stability concerns relative to the proposed harvest or road related activities were identified.

### **3.6 Fisheries:**

No fish resources were found within the boundaries of the proposed sale area. Stream numbers 5, 9 and 18 were surveyed for fish in May 1997. The method of

observation was a backpack electro-shocker. The Vida-McKenzie Watershed Analysis identified the streams in Section 33 as being low potential for fish use. Current condition of the larger streams surveyed found them to be high gradient ( $>15\%$ ), tightly confined channels with substrates mixed between cobbles, small boulders and areas of bedrock channel. Riparian overstory composition is primarily a commercially thinned Douglas-fir stand, with vine maple being the main understory component. Available large woody debris in the active stream channel was determined to be low in the majority of areas surveyed.

## 4.0 ENVIRONMENTAL CONSEQUENCES

This Chapter incorporates the analysis of cumulative effects in the *USDA, Forest Service and the USDI, Bureau of Land Management Final Supplemental Environmental Impact Statement on Management of Habitat for Late-Successional and Old-Growth Related Species Within the Range of the Northern Spotted Owl*, February 1994, (Chapters 3 & 4) and the *Eugene District Proposed RMP/EIS*, November, 1994 (Chapter 4). These documents analyze most cumulative effects of timber harvest and other related management activities. None of the alternatives in this proposal would have cumulative effects on resources beyond those effects analyzed in the above documents. The following analysis has a cumulative effects section that supplements those analyzed in the above documents, and provides site-specific information and analysis particular to the alternatives considered here. Aquatic Conservation Strategy Objectives are listed in Appendix A.

### 4.1 Alternative I - Proposed Action

#### 4.1.1 Merchantable Timber Production and Productivity (Issue #1)

Key Indicator: Acres of regeneration harvest / Estimated timber volume

This alternative would provide an estimated timber volume of approximately 1,680 MBF, which would contribute to the Resource Area's decadal PSQ commitment.

Approximately 46 acres would be regeneration harvest in the General Forest Management Area.

#### 4.1.2 Roads (Issue #2)

Key Indicator: Open Road Densities (miles/sq.mile) / New Road Construction

An existing water pipeline that is authorized under an approved right-of-way would be protected and not impacted by harvest activities.

Based on reconnaissance level field investigations, the proposed timber harvesting, related temporary road construction and road decommissioning is not expected to negatively impact slope stability in the harvest area.

#### Hydrology/Water Quality

Direct effects include the short term addition of sediment to streams during the removal of two stream crossings associated with decommissioning a segment of Road No. 16-2E-33.1. By timing harvest activities to allow for stream crossing removal during low flows and prior to fall rains, the amount of sediment delivered to the streams can be minimized. In the long term, restoration of the stream banks and channel bottoms at those locations would meet ACS Objectives #3 and #5 because the channels would no longer have artificial barriers to sediment transport.

Utilizing existing or temporary roads for harvesting activities, followed by decommissioning, would protect streams from long-term road related runoff and sediment delivery. Fully decommissioning roads no longer needed and adding cross drains on existing permanent roads where needed, would play a role in contributing to a reduction of road related runoff and sediment delivery in the basin. These road related prescriptions would fully

meet the intent of ACS Objective #4. Soil compaction from ground based harvesting would be mitigated within the harvest units, and tilling compacted skid roads would prevent overland flow during larger runoff events. The proposed units are within the rain dominated zone and regeneration harvesting is not expected to impact peak flows under usual storm conditions. Harvesting could potentially contribute to an increase in peak flows under unusual storm conditions. (Unusual storms represent situations that are one standard deviation higher than the average conditions for snow accumulation, temperature, and wind conditions.) These storms represent the worst case scenario and the probability of an unusual storm occurring has been estimated at 1 in 244. If an increase in peak flows occurs under unusual storm event, it is viewed as a short-term impact since the new plantation will grow and result in canopy closure and the effects would diminish. Current standard practices include establishing interim Riparian Reserves adjacent to all surface water features, constructing roads with an adequate number of cross drains, and decommissioning roads not needed after harvesting activities. Because of these standard practices in place today, any effects to stream flow from harvesting or road construction are likely to be negligible and short-lived. As a result, the timing and magnitude of in-stream flows would be maintained and the intent of ACS Objective 6 would be met.

The interim Riparian Reserves for wetlands should adequately maintain water table elevation in wetlands thereby meeting ACS Objective #7.

Restoration work associated with stream crossing removal is not anticipated to affect floodplain inundation.

#### Cumulative Effects

##### The Vida/McKenzie Watershed

Analysis determined that this area has a relatively high road density and recommended that roads not needed in the next 10 years should be considered for full decommissioning. The Proposed Action includes decommissioning several roads, and stream channel restoration in two locations. Establishment of interim Riparian Reserves would provide optimum cover and shading for maintaining stream water temperatures, minimize bank erosion by maintaining plant root strength, and provide a future supply of large wood. The large wood reaching the stream channels would help to moderate peak flows, resist channel erosion during peak flow events, and improve the overall quality of the flow regime.

#### Soils

Impacts to soils from harvesting and site preparation activities would be in the form of soil compaction, soil and litter displacement, and loss of organic material (i.e. due to harvesting and slash removal). This would result in a loss in soil productivity by impacting soil organic matter and nutrient levels, and processes within the soil organism communities. Cable yarding would result in compaction within skid trails, whereas soil compaction from machine piling would be distributed throughout the harvest area. Cable yarding systems and machine piling with a track-mounted excavator would result in approximately 2% or less of the harvest

area left in a compacted condition, a level within our District standards for achieving insignificant growth-loss effect. The residual effect of the soil compaction in the skid trails will remain on the site for 10 to 35 years, depending upon the depth of compaction within the trails.

Ground-based harvesting would result in more area impacted by skid trails (up to 10% vs. 2%). As long as the required moisture restrictions are utilized, the resulting compaction from ground-based harvesting could be mitigated by subsoiling all skid trails or compacted areas, thus achieving insignificant growth-loss effects from compaction

#### Cumulative Effects

Planned temporary spur road construction and road decommissioning in the project area would result in a net decrease in the area converted to road surface. Tilling, planting, and blocking roads to be fully decommissioned would improve recovery of these soils.

#### **4.1.3 Habitat Enhancement (Issue #3)**

Key Indicator: Special Status plant species

Habitat enhancement as directed in the *Cimicifuga elata* Conservation Strategy would take place. This would allow more sunlight to the *Cimicifuga elata* population, potentially increasing seed set and reproduction. As this population in place changes as a result of this action, it would be documented, increasing the knowledge of how to manage this species at other sites and in the future. The action would

potentially increase the fecundity and vigor of this population.

#### **4.1.4 Category 1, 2 and Protection Buffer Species - Fungi, Bryophytes and Lichens (Issue #4)**

Implementation of interim management recommendations.

Key Indicators: Substrate integrity, microclimate

*Ulotia megalospora* (Protection buffer moss): Direct effects would be removal of substrate (trees), indirect effects would be alterations of microclimate, resulting in drier conditions. However, as this is a pioneer species it has a high light requirement and can tolerate drier conditions, so harvest may enhance habitat for *Ulotia*.

Short term Effects: Reduction in population as trees (habitat, substrate) it occupies would be removed. Fewer plants would be available to reproduce and spread into new areas. Long term effects: As this is a pioneer species habitat may be increased as trees planted following the regeneration harvest reach sizes that the *Ulotia* will recolonize.

*Lobaria hallii* (Component 1 Lichen) as this site would be in a reserve, no direct effects would occur. Indirect effects could alter the microclimate of the reserve causing drier conditions. However, *Lobaria hallii* is not an old-growth obligate species, preferring forest openings and drier sites, so drying may be beneficial to the species.

#### **4.1.5 Category 1, 2 and Protection Buffer Species - Mollusks (Issue #5)**

Implementation of interim management recommendations.

Key Indicators: Presence of big leaf maple, presence of down logs, canopy closure

The two mollusk sites that would be buffered should not be directly affected by the proposed project as no activity would be allowed within these buffers. These mollusk sites could be indirectly affected by the regeneration harvest outside of these reserve areas. Regeneration outside of the buffers could make the trees remaining within the buffer more susceptible to being blown down by wind. Windthrow of trees within the reserve areas could also substantially alter the microclimate for these mollusk species. Severe alterations of the microclimate within these buffers could make them unsuitable for these mollusk species.

There are three known Survey and Manage mollusk sites that fall outside of the timber sale unit boundaries. The proposed action would have no direct, indirect or cumulative effects on these three sites.

There are 17 mollusk sites within timber sale units that would not be buffered because they qualify for Treatment Level 1 under the interim guidelines. Up to three big leaf maples per acre would be retained in units unless there is a safety concern. Big leaf maples retained outside of buffered areas may provide suitable habitat for these mollusk species, but it is likely

that the microclimate under these trees would not be suitable for mollusks after regeneration logging. Most mollusk habitat and known sites outside of buffered areas would not be viable following harvest until trees become re-established.

#### **Cumulative Effects on Mollusks, Fungi, Bryophytes and Lichens**

An estimated 7,200 acres of the Federal administered lands in the watershed are forested similarly (40+ years old, 6,400 acres are 80+ years) to those affected by the proposed action. An estimated 3,400 acres of the watershed is less than 40 years old, resulting from previous regeneration harvests.

The Proposed Action (regeneration harvest) would affect 0.7 percent of the 40+ stands. Approximately 0.5 percent of the 80+ stands would be affected.

An estimated 4,200 acres of the forests over 40+ years old are in Riparian Reserves and are well-distributed across the watershed. These areas would provide continuity of habitat over time as similar proportion of age classes would be maintained across the watershed.

The management buffers at each site, unthinned Riparian Reserve, unmapped LSRs, AMA, Bald Eagle Habitat Areas and other areas deferred from harvest would provide refuge for these species and, if individuals do not tolerate the harvests, the refuge would provide a potential source population to recolonize the harvested areas.

Evidence from Eugene District surveys suggest that Survey and Manage

mollusk species are currently well distributed across District lands. The Eugene District interim guidelines are intended to maintain the viability of local populations of these species. This strategy is currently being followed for all Eugene District BLM projects involving ground disturbing activity.

Based on this assessment, the proposed action would not pose any risk to local viability or distribution of these Bryophyte, Fungi, Lichen and Mollusk species on Federally administered lands.

There are no protections for these species on private property that is interspersed with BLM land, so populations of these species on private lands could be at risk for reduction and extirpation. The long term effects this would have on these species across the Eugene District is unknown.

## **4.2 Alternative II - No Action**

### **4.2.1 Merchantable Timber Production and Productivity (Issue #1)**

Key Indicator: Acres of regeneration harvest / estimated timber volume.

Under this alternative, no management activities would take place within the analysis area at this time. No volume from this analysis area would contribute to the decadal PSQ for the Resource Area.

Another analysis area would be proposed for timber sale planning to meet the objective of timber harvest in the GFMA in accordance with the Northwest Forest plan and the harvest

goals of the RMP.

### **4.2.2 Roads (Issue #2)**

Timber harvest activities will increase road activities.

Key Indicators: Open Road Densities (miles/sq.mile) / New Road Construction (miles)

**Hydrology/Water Quality**  
Water quality would be maintained at the current level which supports a healthy riparian, aquatic and wetland ecosystem. Because of this, ACS Objective #4 would be met. ACS Objective #3 would also be met because the physical integrity of the aquatic system would be maintained. The opportunity to restore two stream channels would be postponed by not decommissioning Road No. 16-2E-33.1 at this time.

Since no harvest activities or road related work would be conducted, the existing flow and sediment regime would be maintained, and ACS Objectives #5 and #6 would be met. Existing roads would not be reviewed to determine if improved drainage conditions were necessary. As a result, if road-related sedimentation to streams exists, it would continue to occur, but an increase in sedimentation is not anticipated as long as roads are maintained at the current level. The water table elevation in wetlands and floodplains would be unchanged as a result of implementing this alternative, therefore ACS Objective #7 would be met.

**Cumulative Effects**  
Opportunities to improve drainage on

existing roads and to decommission roads would be postponed to a later date.

#### Soils

In comparison with the Proposed Action, no harvesting would not interrupt existing conifer-soil organism nutrient relationships. No soil compaction or soil displacement would be incurred since no harvesting, no road construction or site preparation would be conducted. Soils in the existing road segments targeted for decommissioning under the Proposed Action would not be in a recovering state.

#### Cumulative Effects

None.

#### 4.2.3 Habitat Enhancement (Issue #3)

Key Indicators: Special Status Plant species (*Cimicifuga elata*)

No habitat manipulation for the *Cimicifuga elata* site would occur at this time for purposes of providing more sunlight to this understory plant.

#### 4.2.4 Category 1, 2 and Protection Buffer Species - Fungi, Bryophytes and Lichens (Issue #4)

Implementation of interim management recommendations.

Key Indicators: Substrate integrity, microclimate

Normal forest succession would take place, eventually favoring species that prefer closed canopy, older forests.

*Ulotia* would probably still be present on south slopes and in opening. *Lobaria hallii* would probably still be present in openings.

#### 4.2.5 Category 1, 2 and Protection Buffer Species - Mollusks (Issue #5)

Implementation of interim management recommendations.

Key Indicators: Presence of big leaf maple, presence of down logs, canopy closure

The No Action alternative would have no direct, indirect or cumulative effects on the three Survey and Manage mollusks (*Megomphix hemphilli*, *Prophysaon dubium* and *Prophysaon coeruleum*).

### 4.3 Alternative III

#### 4.3.1 Merchantable Timber Production and Productivity (Issue #1)

Key Indicator: Acres of regeneration harvest / Estimated Timber volume

This alternative would provide 29 acres of regeneration harvest for a total volume of approximately 1,012 MBF, which would contribute to the Resource Area's decadal PSQ commitment.

#### 4.3.2 Roads (Issue #2)

Timber harvest activities will increase road activities and alter the ecological function of these habitats.

Key Indicator: Open Road Densities



(miles / sq. mile) / New Road  
Construction (miles)

#### Hydrology/Water Quality

Road No. 16-2E-33.1 would not be decommissioned under this alternative and the two existing stream crossings referred to under the Proposed Action would not be removed. Although stream banks and channel bottoms would be maintained (meets ACS Objective #3), the opportunity for restoration at the stream crossings would be delayed. ACS Objectives #4, #5, and #6 would be attained by utilizing existing or temporary roads for harvesting activities, followed by decommissioning, and would protect streams from long-term road related runoff and sediment delivery. As in the Proposed Action, fully decommissioning roads no longer needed and adding cross drains on existing permanent roads where needed, would play a role in contributing to a reduction of road related runoff and sediment delivery in the basin.

Regeneration harvesting is not expected to impact peak flows under usual storm conditions, however harvesting could impact peak flows under unusual storm conditions. As mentioned earlier, these storms represent a worst case scenario, and the frequency of such storms is estimated at 1 in 244. Any increase in peak flows under unusual storm events is viewed as a short-term impact because when the new plantation grows and the canopy closes, effects would diminish. In the long term, the timing and magnitude of peak flows would be maintained and ACS Objective #6 would be met.

The interim Riparian Reserves for the streams and wetlands should adequately

maintain riparian and aquatic function by minimizing bank erosion because plant root strength would be maintained. Water table elevation in wetlands and floodplains would be protected and ACS Objective #7 would be attained.

#### Cumulative Effects

Fewer roads would be fully decommissioned, and no stream channel crossings would be restored, as compared to the Proposed Action. As in the Proposed Action, interim Riparian Reserves would provide optimum cover and shading for maintaining stream temperatures, minimize bank erosion by maintaining plant root strength, and provide a future supply of large wood. The large wood reaching the stream channels would help to moderate peak flows, resist channel erosion during peak flow events, and improve overall quality of the flow regime.

#### Soils

As compared to the Proposed Action, fewer acres would be susceptible to soil compaction and displacement on skid trails from ground-based harvesting. As long as the required moisture restrictions are utilized, the resulting compaction could be mitigated by subsoiling all skid trails or compacted areas, thus achieving insignificant growth-loss effects from compaction.

Fewer roads would be fully decommissioned as compared to the Proposed Action. The soils in the road prisms of Road No. 16-2E-33.1 and the cat road in the southeast portion of the section would not be in a recovering state since these roads would not be tilled, planted, and blocked.

#### Cumulative Effects

Planned temporary spur road construction and road decommissioning in the project area would result in a net decrease in the area converted to road surface. Tilling, planting, and blocking roads to be fully decommissioned would improve recovery of these soils.

#### **4.3.3 Habitat Enhancement (Issue #3)**

Key Indicator: Special Status Plant Species

This alternative would have the same effects as the proposed action.

#### **4.3.4 Category 1, 2 and Protection Buffer Species - Fungi, Bryophytes and Lichens (Issue #4)**

Implementation of interim management recommendations.

Key Indicators: Substrate integrity, microclimate

Same as Alternative I

#### **4.3.5 Category 1, 2 and Protection Buffer Species - Mollusks (Issue #5)**

Implementation of interim management recommendations.

Key Indicators: Presence of big leaf maple, presence of down logs, canopy closure

Same as Alternative I

## **5.0 Other Environmental Effects Common to All Action Alternatives**

### **5.1 Effects on Fisheries and Riparian Resources**

No detrimental cumulative effects to downstream fisheries resources are expected from any of the Action Alternatives. The establishment of interim Riparian Reserves described in the ROD/Standards and Guidelines (pg. 23-24) on all streams found adjacent to the proposed harvest area would be adequate to protect RR resources.

### **5.2 Prime Farmland and Rangeland**

There is no prime farmland or rangeland within the Federal ownership of the proposed harvest units.

### **5.3 Wetlands and Flood Plains**

The proposed timber sale would not have any adverse impacts on flood plains downstream from the Proposed Harvest Area. None of the Action Alternatives would have adverse effects on nearby wetlands.

### **5.4 Recreation**

The proposed sale would not have any adverse effects on the dispersed recreational opportunities existing in the project area. Proposed road closures and decommissioning would not affect future vehicle access opportunities into these sections of land. Part of the analysis area is subject to the Visual Resource Management (VRM) Class III (see designation on attached map) management prescription

under the 1995 Eugene District Record of Decision and Resource Management Plan. The treatments proposed for the Goodpasture Analysis Area are consistent with this management prescription. There are no Wilderness Areas or roadless areas in or adjacent to the analysis area.

There is a Proposed Wild and Scenic River designation on the McKenzie River (½ mile to the north) adjacent to the analysis area. There are no visual effects of the proposed harvest areas from the river, and the analysis area is outside the 1/4 mile corridor (1/4 mile on each side of the river) interim protective management on BLM administered land. There would be no adverse effect to the Outstandingly Remarkable Values, which resulted in rivers being found eligible/suitable.

### **5.5 Sensitive Plant Survey**

Surveys for vascular plants were conducted in the spring of 1992. *Cimicifuga elata* has been documented in the analysis area but not in any of the harvest areas. The conservation plan for this species (Area 8) would be implemented and would potentially increase the fecundity and vigor of this population of *Cimicifuga elata*.

### **5.6 Threatened and Endangered Species**

Bull trout in the McKenzie River basin are listed Threatened under the Endangered Species Act (ESA). Informal conferencing (on the "Not Likely to Adversely Affect" proposed action) has been completed and a letter of concurrence received from US Fish and Wildlife Service on June 24, 1998.

Spring chinook salmon in the Upper Willamette River basin (including the McKenzie) are listed Threatened under the ESA. Informal conferencing (on the "Not Likely to Adversely Affect" proposed action) was completed on May 7, 1999 and a letter of concurrence from the National Marine Fisheries Service (NMFS) is in process.

Protocol surveys have been conducted for the Northern Spotted Owl (NSO) in the analysis area. No NSO site occurs in or adjacent to the proposed harvest areas. The planned conservation strategy for the Northern Spotted Owl within the Northwest Forest Plan relies on a system of large reserve areas, and viable owl populations outside these reserves are not necessarily essential for the conservation of the species. Impacts to the conservation of the species were considered during formal consultation with the USFWS, and it was determined that the action alternatives would not jeopardize the continued existence of the NSO.

## **5.7 Hazardous Materials Survey**

There are no Hazardous Materials at this time in the analysis area.

## **5.8 Cultural Resources**

No cultural sites have been identified. The analysis file contains the cultural report.

## **5.9 American Indian Rights**

No impacts on American Indian social, economic or subsistence rights are anticipated. No impacts are anticipated on the American Indian Religious Freedom Act. Management action information is sent to the Confederated Tribes of the Grand Ronde and Confederated Tribes of the Siletz.

## **6.0 List of Agencies and Persons Consulted**

This Environmental Analysis is being mailed out to 22 members of the general public and organizations. A letter was sent out to the adjacent land owners in February 1997 which identified specific areas being considered, project issues and time lines for providing input. Also a summary was sent to those receiving the

“Eugene BLM Planning and Project Focus” Spring 1997 (approximately 250 mailings. A complete listing is available at the Eugene District Office).

Maps of the proposed harvest areas were sent to the Confederated Tribes of Grand Ronde and Confederated Tribes of Siletz on September 9, 1997. No comments were received.

## 7.0 List of Preparers

### THE INTERDISCIPLINARY TEAM

Each member has reviewed this EA and concurs with its contents.

| NAME              | TITLE                    | RESOURCE/DISCIPLINE  |
|-------------------|--------------------------|----------------------|
| Cheshire Mayrsohn | Botanist                 | Botany               |
| Paula Larson      | Wildlife Biologist       | Wildlife Habitat     |
| Kris Ward         | Hydrologist              | Soil/Water Resources |
| Phil Dills        | Fuels Mgt. Specialist    | Fuels                |
| Dave Reed         | Fuels Mgt. Specialist    | Fuels                |
| Mike Southard     | Archaeologist            | Archaeology          |
| Fred Kallien      | Sivilculturist           | Silviculture         |
| John Chatt        | Wildlife Bio. Tech.      | Wildlife Habitat     |
| Karen Martin      | Fisheries Biologist      | Fisheries            |
| Mike Sabin        | Forester                 | Engineering          |
| Don Wilbur        | Environmental Specialist | Team Facilitator     |
| Jack Zwiesler     | Forester                 | EA Writer/Team Lead  |
| Trish Wilson      | Landscape Planner        | NEPA Coordination    |

## Appendix A

### AQUATIC CONSERVATION OBJECTIVES

1. Maintain and restore the distribution, diversity, and complexity of watershed and landscape-scale features to ensure protection of the aquatic systems to which species, populations, and communities are uniquely adapted.
2. Maintain and restore spatial and temporal connectivity within and between watersheds. Lateral, longitudinal, and drainage network connections include flood plains, wetlands, upslope areas, headwater tributaries, and intact refugia. These lineages must provide chemically and physically unobstructed routes to areas critical for fulfilling life history requirements of aquatic and riparian-dependent species.
3. Maintain and restore the physical integrity of the aquatic system, including shorelines, banks, and bottom configurations.
4. Maintain and restore water quality necessary to support healthy riparian, aquatic, and wetland ecosystems. Water quality must remain in the range that maintains the biological, physical, and chemical integrity of the system and benefits survival, growth, reproduction, and migration of individuals composing aquatic and riparian communities.
5. Maintain and restore the sediment regime under which an aquatic ecosystem evolved. Elements of the sediment regime include the timing, volume, rate, and character of sediment input, storage, and transport.
6. Maintain and restore in stream flows sufficient to create and sustain riparian, aquatic, and wetland habitats and to retain patterns of sediment, nutrient, and wood routing (i.e., movement of woody debris through the aquatic system). The timing, magnitude, duration, and spatial distribution of peak, high, and low flows must be protected.
7. Maintain and restore the timing, variability, and duration of flood plain inundation and water table elevation in meadows and wetlands.
8. Maintain and restore the species composition and structural diversity of plant communities in riparian zones and wetlands to provide adequate summer and winter thermal regulation, nutrient filtering, appropriate rates of surface erosion, bank erosion, and channel migration, and to supply amounts and distributions of coarse woody debris sufficient to sustain physical complexity and stability.
9. Maintain and restore habitat to support well-distributed populations of native plant, invertebrate, and vertebrate riparian-dependent species.

*The Finding of No Significant Impact (FONSI) is not a decision document. Its purpose is to state that the actions proposed do not have a significant effect on the environment and that an EIS is not needed according to information contained in the EA and other available information. The unsigned FONSI is sent out with the EA to let you know that we feel that our actions do not warrant an EIS.*

UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
EUGENE DISTRICT OFFICE

1792A

**Preliminary Finding of No Significant Impact (FONSI)**  
**GOODPASTURE ANALYSIS AREA NO. E-99-233**  
**EA OR 090-99-09**

The Interdisciplinary Team for the McKenzie Resource Area, Eugene District, Bureau of Land Management has completed an Environmental Assessment (EA) and analyzed a proposal to harvest Federal forest in the Goodpasture Analysis Area. Goodpasture is located approximately 15 miles east of Springfield, Oregon in T. 16 S., R. 2 E., Section 33, of the Willamette Meridian. The proposal includes; 1) a regeneration harvest on seven areas totaling 46 acres, and 2) habitat enhancement on one area (10 acres) involving the felling of 15 trees, girdling of 15 trees, and topping of 20 trees from the General Forest Management Area (Matrix). The Proposed Action would be done in compliance with the Standards and Guidelines of the Record of Decision (ROD) for the Forest Plan.

The proposed harvest would provide jobs and supply wood products. The issues addressed in the EA concern acres and estimated timber volume of regeneration harvest, open road densities, habitat enhancement and Survey and Manage Species. Cable logging systems and ground based logging systems would be used from existing roads and temporary spurs to be constructed. Approximately 0.8 mile of roads would be fully decommissioned upon completion of harvest. No permanent roads would be constructed.

The design features of the Proposed Action are described in the attached Goodpasture Environmental Assessment (OR 090-EA-99-09). Anticipated impacts to the environment are expected to be insignificant. The Proposed Action and alternatives to harvest timber from Matrix lands in the Eugene District are in conformance with the *Record of Decision for Amendments to Forest Service and Bureau of Land Management Planning Documents within the Range of the Northern Spotted Owl* (April 1994), and the *Eugene District Record of Decision and Resource Management Plan* (June 1995).

The anticipated environmental effects contained in this EA are based on research, professional judgement, and experience of the Interdisciplinary (ID) team and Eugene District Resources staff. No significant adverse impacts are expected to: (1) Threatened or Endangered species, (2) Flood plains or Wetlands/Riparian areas, (3) Wilderness Values, (4) Areas of Critical Environmental Concern, (5) Cultural Resources, (6) Prime or unique Farmland, (7) Wild and Scenic Rivers, (8) Air Quality, (9) Native American Religious Concerns, (10) Hazardous or Solid Waste, or (11) Water Quality.

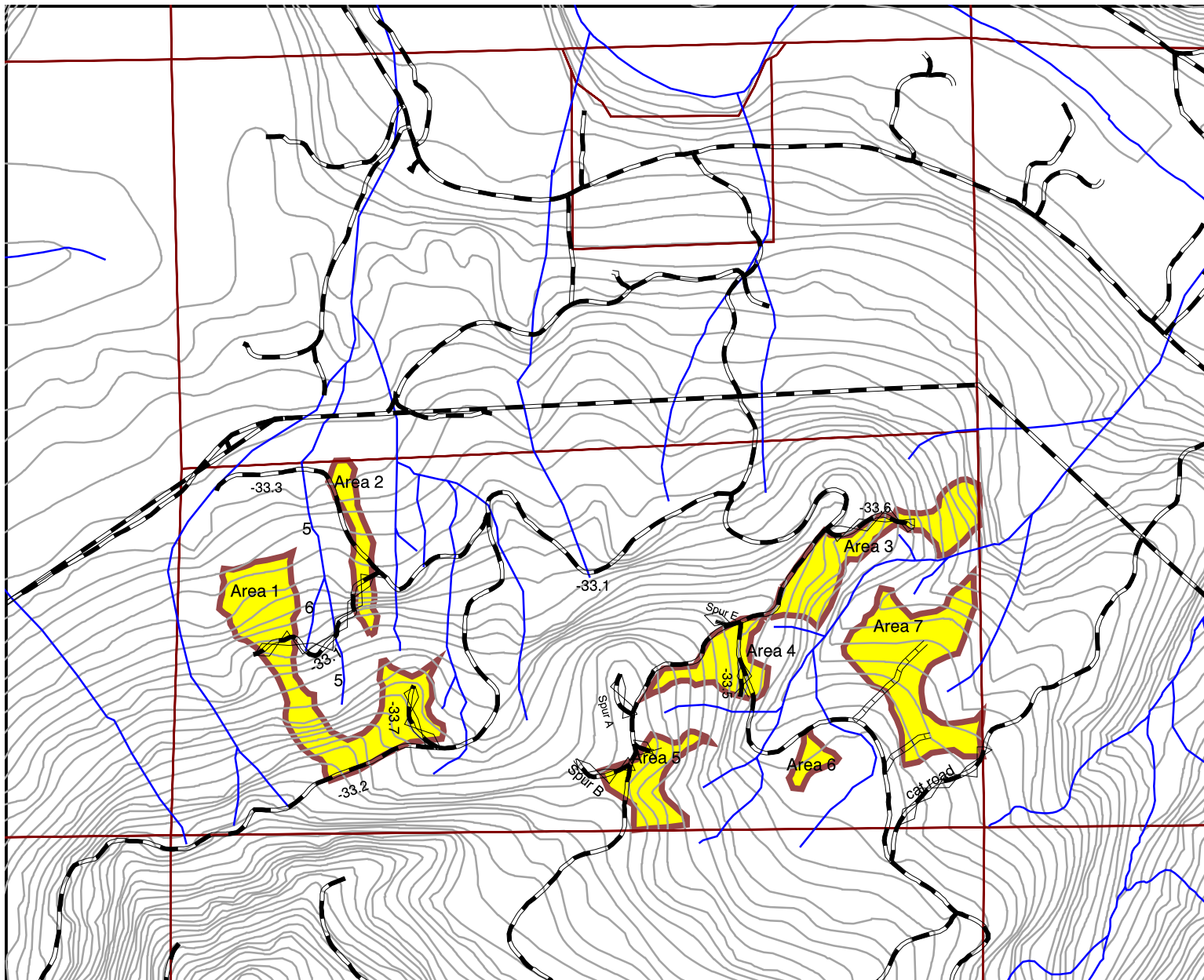
**DETERMINATION**

On the basis of information contained in the EA, and all other information available to me, it is my determination that the Alternatives analyzed do not constitute a major Federal action affecting the quality of the human environment. Therefore, a new EIS or supplement to the existing EIS is unnecessary and would not be prepared for this proposed timber sale.

Approved by: \_\_\_\_\_  
Field Manager, McKenzie Resource Area

Date: \_\_\_\_\_





#### Area in Acres

1.....13 acres

2.....3

3.....9

4.....4

5.....4

6.....1

7.....12

Total acres.....46

## 1999 Harvest Area Map Proposed Action Goodpasture - Regen

T.16S., R.2E., Sec 33

500 0 500 1000 Feet

map scale 1"=1000'

1/20/1999

-  Roads
-  Temporary spur
-  Decommission road
-  Streams
-  Section Lines
-  20' Contour interval
-  Project Area



